

NOUS41 KWBC DDHHMM  
PNSWSH

Technical Implementation Notice 15-24  
National Weather Service Headquarters Washington DC  
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To:           Subscribers:  
              -Family of Services  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPORT  
              Other NWS Partners and NWS Employees

From:       Tim McClung  
              Chief Operating Officer  
              NWS Office of Science and Technology Integration

Subject: Add Simulated Geostationary Operational Environmental  
          Satellites - R Series (GOES-R) Imagery to the Satellite  
          Broadcast Network (SBN or NOAAPORT) effective  
          May 7, 2015

Effective on or after Thursday, May 7, 2015, simulated GOES-R Advanced Baseline Imager (ABI) imagery will be added to the SBN and NOAAPORT. The simulated GOES-R ABI imagery is intended only to test networks and systems. This simulated imagery should not be used for weather forecasts and analyses.

The GOES-R satellite is scheduled to launch in March 2016. NWS plans call for SBN/NOAAPORT dissemination of a subset of GOES-R products. To begin testing and evaluation of NWS systems, and to facilitate testing and evaluation of partner systems, a series of pre-launch tests is being planned from May 2015 to February 2016.

Among the GOES-R products planned for SBN distribution, ABI imagery is expected to be the most voluminous. The initial focus of

GOES-R-related SBN testing will therefore be on GOES-R imagery. Simulated GOES-R imagery will gradually be added to the SBN on or after May 7, 2015. The simulated imagery will be added progressively, initially restricted to limited data distributions, only within normal business hours, Monday-Friday, 8 am-5 pm EDT. For the first several weeks, there will be deliberate pauses in testing. Therefore, further details about these tests (e.g., specific test segment start and end times) will be communicated via NOAAPORT Bulletins with message headers NOUS72 KNCF and ADMNCF.

Beginning approximately July 2015, NWS plans to disseminate variable representative sets of simulated imagery on a quasi-continuous basis for the duration of these tests. These tests of simulated GOES-R imagery are expected to extend through 2015, possibly into early 2016. Simulated GOES-R non-imagery products may also be added to the SBN during 2015.

The simulated GOES-R imagery will be separated and distinguished from the SBN's operational traffic in two ways:

- The simulated data will be broadcast on distinct channels (PIDs 107 and 108), and thus separated from the SBN's operational data. PID 107 corresponds to the SBN's GOES-R West channel and PID 108 corresponds to the SBN's GOES-R East channel.
- The simulated data will have WMO Headers (described below) that are expressly for the simulated imagery, i.e., different from those of the SBN operational products.

The WMO headers have been assigned to distinguish the simulated GOES-R imagery from other SBN products and to differentiate between GOES spacecraft stations (i.e., GOES East versus GOES West), geographical sectors (e.g., Hawaii Regional vs Alaska Regional) and ABI channels, i.e., 1-16. The headers are as follows, with references to the 11 character template:

Template: **T1 T2 A1 A2 ii CCCC**

**T1** = T

**T2** = I

**A1** = R for large-scale (non-mesoscale) sectors  
= S for mesoscale sectors

**A2** Where A1=R, for large-scale (non-mesoscale) sectors, A2 corresponds to geographical sectors as follows:

- = A for the Alaska Regional sector (PID 107)
- = E for the East CONUS sector (PID 108)
- = H for the Hawaii Regional sector (PID 107)
- = P for the Puerto Rico Regional sector (PID 108)
- = S for the East Full Disk (PID 108)
- = T for the West Full Disk (PID 107)
- = W for the West CONUS sector (PID 107)

Where A1=S, for mesoscale sectors, A2 values corresponds to geographical latitude/longitude areas as follows:

- = A for 45 deg. N  $\leq$  Lat.  $<$  60 deg. N and  
120 deg. W  $<$  Long.  $\leq$  135 deg. W
- = B for 45 deg. N  $\leq$  Lat.  $<$  60 deg. N and  
105 deg. W  $<$  Long.  $\leq$  120 deg. W
- = C for 45 deg. N  $\leq$  Lat.  $<$  60 deg. N and  
90 deg. W  $<$  Long.  $\leq$  105 deg. W
- = D for 45 deg. N  $\leq$  Lat.  $<$  60 deg. N and  
75 deg. W  $<$  Long.  $\leq$  90 deg. W
- = E for 45 deg. N  $\leq$  Lat.  $<$  60 deg. N and  
60 deg. W  $<$  Long.  $\leq$  75 deg. W
- = F for 30 deg. N  $\leq$  Lat.  $<$  45 deg. N and  
120 deg. W  $<$  Long.  $\leq$  135 deg. W
- = G for 30 deg. N  $\leq$  Lat.  $<$  45 deg. N and  
105 deg. W  $<$  Long.  $\leq$  120 deg. W
- = H for 30 deg. N  $\leq$  Lat.  $<$  45 deg. N and  
90 deg. W  $<$  Long.  $\leq$  105 deg. W
- = I for 30 deg. N  $\leq$  Lat.  $<$  45 deg. N and  
75 deg. W  $<$  Long.  $\leq$  90 deg. W
- = J for 30 deg. N  $\leq$  Lat.  $<$  45 deg. N and  
60 deg. W  $<$  Long.  $\leq$  75 deg. W
- = K for 15 deg. N  $\leq$  Lat.  $<$  30 deg. N and  
120 deg. W  $<$  Long.  $\leq$  135 deg. W
- = L for 15 deg. N  $\leq$  Lat.  $<$  30 deg. N and  
105 deg. W  $<$  Long.  $\leq$  120 deg. W
- = M for 15 deg. N  $\leq$  Lat.  $<$  30 deg. N and

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    90 deg. W < Long. <= 105 deg. W
= N for 15 deg. N <= Lat. < 30 deg. N and
    75 deg. W < Long. <= 90 deg. W
= O for 15 deg. N <= Lat. < 30 deg. N and
    60 deg. W < Long. <= 75 deg. W
= P for 0 deg. N <= Lat. < 15 deg. N and
    90 deg. W < Long. <= 135 deg. W
= Q for 0 deg. N <= Lat. < 15 deg. N and
    60 deg. W < Long. <= 90 deg. W
= R for 45 deg. N <= Lat. < 90 deg. N and
    135 deg. W < Long. <= 180 deg. W
= S for 0 deg. N <= Lat. < 45 deg. N and
    135 deg. W < Long. <= 180 deg. W
= T for 60 deg. N <= Lat. < 90 deg. N and
    90 deg. E < Long. <= 135 deg. W
= U for 0 deg. N <= Lat. < 60 deg. N and
    90 deg. E < Long. <= 60 deg. W
= V for 0 deg. N <= Lat. < 90 deg. N and
    180 deg. W < Long. <= 90 deg. E
= W and X are reserved for future use
= Y for 90 deg. S <= Lat. < 0 deg. S and
    105 deg. W < Long. <= 90 deg. E
= Z for 90 deg. S <= Lat. < 0 deg. S and
    90 deg. E < Long. <= 105 deg. W

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Where mesoscale boxes T, U and Z extend across the prime meridian (0 deg. longitude) and boxes V and Y extend across the International Dateline (180 deg. longitude). Sector boundaries of 0 deg. N or 0 deg. S refer to the equator. The "<=" symbols refer to "less than or equal to." Mesoscale sectors from GOES West will be disseminated on SBN PID 107 and mesoscale sectors from GOES East will be disseminated on SBN PID 108.

**ii** = ABI channel number (01 - 16); between the ii and CCCC is a space

**CCCC** = KNES (signifies that NESDIS is the creating data center)

Although the WMO header scheme above is for simulated imagery, it is anticipated that these headers will be applied similarly to the actual GOES-R imagery products scheduled for SBN addition during 2016.

The file format for these products will be netCDF4.

Additional information about this new data stream (including headers, file-format descriptions, sector definitions, sample files and further test information) will be posted at the following web site during May 2015, with updates thereafter:

<http://www.nws.noaa.gov/noaaport/html/noaaport.shtml>

Again, the simulated GOES-R imagery to be added to the SBN is for system testing. These products should not be used for weather forecasts or scientific analyses.

For questions pertaining to this change or upcoming plans for the addition of GOES-R products onto NOAAPORT, please contact:

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National TINs are online at:

<http://www.weather.gov/os/notif.htm>

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